UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

June 12, 2013

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation
Federal Aviation Administration
800 Independence Ave, SW
Suite 325
Washington, DC 20591

Dear Dr. Nield:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Environmental Impact Statement (DEIS) prepared by the U.S. Federal Aviation Administration (FAA) for the SpaceX Texas Launch Site, Cameron County, Texas. The National Park Service, U.S. White Sands Missile Range, and the Army Corps of Engineers are cooperating agencies in the preparation of this NEPA document.

Based upon our analysis, EPA rates the DEIS as "**EO-2**" (**Environmental Objections - Request for Additional Information**). The EPA's Rating System Criteria can be found here: http://www.epa.gov/oecaerth/nepa/comments/rating.html. The "EO" rating is based on potential impacts to special aquatic sites or aquatic resources of national importance and the lack of an appropriate compensatory mitigation plan. The "2" indicates the DEIS does not contain sufficient information in the areas of air quality, mitigation, wetlands, alternatives analysis, environmental justice and tribal consultation.

On May 21, 2013, EPA Region 6 issued comments to the Galveston District Corps of Engineers (COE) on the Section 404 Public Notice [SWG-2012000381], dated April 23, 2013, associated with this project and initiated the Section 404(q) Dispute Resolution Process for Individual Permits with the Corps in accordance with Part IV.3(a) of the 1992 404(q) Memorandum of Agreement. EPA's comment to the Corps stated, "***the project may result in substantial and unacceptable impacts to aquatic resources of national importance and therefore EPA recommends denial of the permit, as proposed.***" We have attached with our detailed comments a copy of our May 21st letter for your consideration.

Under the Section 404(q) process, EPA, the Corps, FAA and the applicant are already actively engaged in dispute resolution discussions. We are hopeful this will lead to the

development of acceptable project modifications and mitigation measures mutually agreed upon to avoid, minimize and mitigate the impacts.

EPA strongly recommends this resolution process be completed prior to the filing and release of the Final EIS for agency and public review. Once completed, the mitigation plan or lack of agreement should be documented in the FEIS. Any mitigation developed should be incorporated in the Record of Decision document.

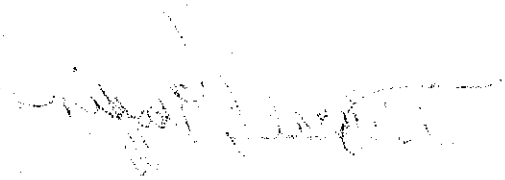
Detailed comments on the DEIS are enclosed with this letter which more clearly identifies EPA's concerns and the information requested for incorporation into the Final EIS (FEIS). Responses to our comments should be placed in a dedicated section of the FEIS and should specify the specific location in the FEIS where the revision, if any, was made. If no revision was made, a clear explanation should be included.

EPA appreciates the opportunity to review the DEIS. Please send our office two copies of the FEIS, and an internet link, when it is sent to the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Federal Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20004. Our classification will be published on the EPA website, www.epa.gov, according to our responsibility under Section 309 of the CAA to inform the public of our views on proposed Federal actions. If you have any questions or concerns, please contact Rhonda Smith or Michael Jansky of my staff by e-mail at smith.rhonda@epa.gov or jansky.michael@epa.gov or by phone at 214-665-8006 or 214-665-7451, respectively, for assistance.

Sincerely,

Debra A. Griffin
Associate Director
Compliance Assurance and
Enforcement Division

Enclosure



DETAILED COMMENTS
ON THE
DRAFT ENVIRONMENTAL IMPACT STATEMENT
PREPARED BY
THE US FEDERAL AVIATION ADMISTRATION
FOR THE
SPACE X TEXAS LAUNCH SITE
LOCATED IN
CAMERON COUNTY, TEXAS

BACKGROUND

The Federal Aviation Administration (FAA) Office of Commercial Space Transportation (AST) has prepared this Draft Environmental Impact Statement (EIS) to evaluate the potential environmental impacts that may result from the FAA/AST proposal to issue launch licenses and/or experimental permits that would allow Space Exploration Technologies Corporation (SpaceX) to launch the Falcon 9 and Falcon Heavy orbital vertical launch vehicles and a variety of reusable suborbital launch vehicles from a launch site on privately owned property in Cameron County, Texas). Issuing launch licenses and experimental permits by FAA is considered a major Federal action subject to environmental review under the National Environmental Policy Act (NEPA) of 1969 as amended Cooperating agencies include the National Aeronautics and Space Administration (NASA), the National Park Service (NPS), the U.S. Army White Sands Missile Range (WSMR), and the U.S. Army Corps of Engineers (USACE).

The proposed vertical launch area is located at the eastern terminus of Boca Chica Boulevard (State Hwy 4), in a sparsely populated coastal area off the Gulf of Mexico, approximately 3 miles north of the US and Mexico border. The project site is on a 56.5 acre property which is completely undeveloped. Of the 56.5 project property, 25.43 acres are jurisdictional wetlands and 31.07 acres are sporadically vegetated sand dunes. The launch pad would occupy only 20 acres.

COMMENTS

General Comment

On the left hand side of the cover page is a visual simulation of the operational launch site that reveals some of the major factors involved in this project. The launch site is directly landward of a washover cut in the dune system along Boca Chica Beach and State Highway 4. This breach could make the launch site extremely vulnerable to storm surges and frequent flooding from tropical depressions and hurricanes from the Gulf of Mexico. The simulation reveals the unstable nature of this site with shallow groundwater persistently present immediately under the soil at 20 inches or less. Grading, piling, filling, and launching over this saturated substrate may result in an unstable foundation and potential failure of above ground structures. Construction of underground power and data lines and operation of sewage collection and treatment facilities in this drainage field could be problematic.

Recommendation: Further explanation and required design mitigation should be identified and incorporated into the FEIS.

At the proposed vertical launch site the predominant soil series is Mustang fine sand, saline. This soil type has severe limitations for septic tank absorption fields, building site development, sanitary facilities, construction materials, and water management. The physical and chemical properties of this soil type indicate that it is highly permeable, shallow to clay, and highly saline. The soil and water features indicate that this soil type is subject to frequent flooding, a seasonal high water table, and a high risk of corrosion. With a gross liftoff weight of approximately 3.5 million pounds, the Falcon Heavy may not achieve maximum liftoff in the existing unstable substrate at this location.

Recommendation: Explanation of the design features used to compensate for these impact concerns should be identified and incorporated into the Final EIS.

EPA is also concerned that stormwater runoff from filled materials, accidental rocket fuel spills, and return water from the Deluge Water System would likely result in a long-term increase in pollution in South Bay and/or the Gulf of Mexico and possibly affect the natural functions of the remaining special aquatic sites. Furthermore, a launch failure would scatter debris into the remaining special aquatic sites and/or the Gulf of Mexico. EPA is concerned drainage patterns in the project area drain into waters of the U.S., including special aquatic sites. Extensive grading and filling of this area may disrupt the natural flow and circulation of waters of the U.S. to the remaining special aquatic sites and/or the Gulf of Mexico.

Recommendation: These impact concerns and the required mitigation measures to avoid or minimize these potential impacts should be identified and incorporated into the Final EIS.

Corps of Engineers as Cooperating Agency

The DEIS identifies the US Army Corps of Engineers as a cooperating agency. The COE's jurisdictional responsibility lies in the issuance of a Section 404 Permit for the proposed action. According to the COE 404 Public Notice (PN), *"The Basic Project Purpose is to construct and operate an exclusive launch site on privately owned property. The project is considered to be "non-water dependent" as it does not require siting in or on a special aquatic site, such as a wetland, to meet the basic project purpose. The Overall Project Purpose is to construct and operate a vertical launch area and control center area to launch the Falcon 9 and Falcon Heavy orbital vertical launch vehicles and a variety of reusable suborbital launch vehicles from a launch site on privately owned property. The proposed private launch site is needed to provide SpaceX with an exclusive launch site that would allow the company to meet tight launch windows."*

Recommendation: The Final EIS should provide a more expanded and robus discussion on why other alternatives considered were eliminated. EPA agrees that the basic purpose of this project is not water dependent under the 404 (b)(1) guidelines promulgated at 40 CFR Part 230 under Section 404(b)(1) of the Clean Water Act (CWA). While EPA understands that SpaceX needs an exclusive launch site to meet tight launch schedules, it

is not clear in the DEIS why FAA should approve locating the launch site in potential *aquatic resources of national importance*. EPA contends there are, for example, many spoil islands and other disturbed uplands along the GIWW in Texas and Louisiana that could potentially serve as a good base for the launch site and meet the other evaluation factors presented further in the DEIS.

Alternatives/On-site Alternatives

According to the DEIS, SpaceX developed evaluation factors that were applied to SpaceX's identified potential locations for operation of the Falcon 9 and Falcon Heavy launch vehicle program". Nine (9) evaluation factors were included for the alternatives analysis. However, none of the evaluation factors were environmental considerations. EPA believes environmental factors must be considered. For the launch area, Space X considered eight (8) more evaluation factors for two (2) possible sites. However, as state above, none of the evaluation factors were environmental considerations. Environmental factors must be considered.

Recommendation: FAA should include in the FEIS environmental considerations or site selection such as avoidance of significant impacts to special aquatic sites that are tidally influenced. This is particularly important because of severe soil limitations. FAA should also develop factors that would evaluate site selection not contiguous to or near critical habitat for threatened or endangered species.

Wetlands/Floodplains/Vegetation

This section of the DEIS identifies a total of 25.43 acres of wetlands present at the vertical launch area (Exhibit 3.7-4) and 0.04 acre of wetlands on Parcel 3 of the control center area (Exhibit 3.7-5). The Jurisdictional Wetland Determination report (Appendix F) divides the wetlands into depressional areas, high marsh areas, and unvegetated salt flats. Based on the March 7, 2013 site visit, EPA staff documented tidal flats and wetlands present in the vertical launch area. The vegetated wetlands are very diverse within the site. Low depressional areas are dominated by *Monanthachloe littoralis, Salicornia virginica, Borrichia frutescens, Batis maritima, and Sporobolus virginicus.* Backdune wetlands are dominated by *Distichlis spicata, Borrichia frutescens, Rayjacksonia phyllocephala, and Sesuvium portulacastrum.*

From Appendix F, Page 12 "Additionally, three small unvegetated depressional features were identified in the northwestern portion of the site". Based on the site visit, portions of these depressional areas appear to be algal depressions. The vertical launch and the control center areas are located entirely within the 100-year floodplain (Exhibit 3.7-8). The DEIS states that the 56.5 acre launch site consists of 25.43 acres of emergent and shrub scrub wetlands and sand flats. Approximately 31.1 acres are uplands.

Recommendation: The FAA should develop a more robus alternative analysis explaining why other alternatives sites considered were eliminated.

Construction, Wetlands

"The construction of the vertical launch and control center areas would result in the permanent impact of 6.19 acres of wetlands: approximately 3.34 acres of direct impacts to

wetlands and 2.85 acres of indirect impacts to wetlands. The breakdown of these impacts is as follows. At the vertical launch area, approximately 3.30 acres of wetland impacts consisting of 0.7 acre of unvegetated depressional wetlands and unvegetated wetland salt flats (E2US2) and 2.60 acres of vegetated wetlands (E2SS3 and E2EM1) (Table 4.7-1 and Exhibit 4.7-1) would be impacted."

"In addition, the construction of buildings and roads at the vertical launch area would effectively cut off the tidal influence to 2.85 acres of wetland. These indirect wetland impacts are comprised of 2.54 acres of high marsh vegetated wetlands and 0.31 acre of unvegetated wetland salt flats (Table 4.7-1 and Exhibit 4.7-3)". "Additionally, in accordance with the DOT Order 5660.1A, the FAA has determined there is no practicable alternative to such construction (refer to Section 2.3, *Alternatives Considered but Not Carried Forward*), and the Proposed Action includes all practicable measures to minimize harm to wetlands which may result from construction (see Section 2.3.1, *SpaceX On-Site Alternatives*)".

> ***Recommendation*:** The FAA should consider adding environmental evaluation factors in Section 2 for site selection.

Operation, Groundwater

Deluge Water System: "As described in Section 2.1.2, *Construction Activities*, a deluge water system consisting of one 250,000-gal water tower would be installed at the vertical launch area for sound and vibration suppression. Up to 200,000 gal would be discharged during a launch event, and up to 12 launch events would be scheduled per year, resulting in a total deluge water system use of 2,400,000 gal per year (gpy) (7.37 afy). A well located adjacent to the water tower, and drilled into a highly transmissive (i.e., yielding relatively large water quantities) portion of the Gulf Coast Aquifer (the Chicot Aquifer) would provide all deluge water at an average well pumping rate of 4.6 gpm."

> ***Recommendation:*** In the FEIS, the FAA should evaluate the effect of return water from the Deluge Water System into special aquatic sites and measures taken to avoid or minimize impacts. Design features to avoid or minimize these potential impacts should be identified and incorporated into the FEIS.

Mitigation and Special Conservation Measures

The DEIS explains that, "*If a Department of the Army permit is authorized, it would be conditioned to require compensatory mitigation to offset the loss of function to waters of the U.S. resulting from the Proposed Action. Currently, SpaceX's compensatory mitigation plan proposes to preserve in-kind, high-quality wetlands at a ratio of five times the amount of wetlands impacted by the Proposed Action. The mitigation site would either be conveyed to a State or Federal natural resource agency or held by a third-party in a perpetual conservation easement.*"

> ***Recommendation:*** For compensatory mitigation, EPA prefers restoration in combination with preservation of former wetlands or the creation of new wetlands with permanent

protection. For example: In-kind compensatory mitigation in the form of restoration or enhancement and long term protection at other sites in the watershed may be preferable to sole preservation and may result in a net gain of wetland functions. In addition to the direct loss of wetland functions, EPA is concerned with potential secondary adverse impacts to water quality and natural ecological functions by construction of this project in wetlands.

EPA is also concerned that all impacts to adjacent special aquatic sites, including wetlands, may have not been identified at the proposed sites. EPA believes that adjacent flats and wetlands at the launch site could be adversely affected by the project.

Recommendation: EPA recommends that these impacts be considered in compensatory mitigation for all anticipated secondary impacts to waters of the U.S.

Air Quality

Mitigation Measures to Reduce Potential Air Quality Impacts-Table ES.8-1 (pg. ES-23): This section of the DEIS states that project emissions from ground disturbance, use of equipment, coatings application, or other construction activities will be addressed with appropriate best management practices (BMPs) such as minimal idling of engines, watering of soils to be disturbed, water and dust abatement applied to dirt roads, use of low volatility coatings, and other recognized controls. In addition to these BMPs and all applicable local, state, or federal requirements, the EPA believes additional mitigation measures be included in a construction emissions mitigation plan.

Recommendation: EPA suggest the following control measures be included in the FEIS to reduce air quality impacts associated with emissions of Nitrous Oxides (NOx), Carbon Monoxide (CO), Particulate Matter (PM), Sulfur Dioxide (SO_2), and other pollutants from construction-related activities:

Fugitive Dust Source Controls:

- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions; and
- Prevent spillage when hauling material and operating non-earthmoving equipment and limit speeds to 15 miles per hour. Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Plan construction scheduling to minimize vehicle trips;
- Verify idling restrictions through unscheduled inspections;
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, prevent tampering, and conduct unscheduled inspections to ensure these measures are followed;
- If practicable, utilize new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, commit to the best available emissions control

technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible;

- Lacking availability of non-road construction equipment that meets Tier 4 engine standards, the responsible agency should commit to using EPA-verified particulate traps, oxidation catalysts and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site; and
- Consider alternative fuels and energy sources such as natural gas and electricity (plug-in or battery).

Administrative controls:

- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking;
- Develop a construction traffic and parking management plan that maintains traffic flow and plan construction to minimize vehicle trips; and
- Identify sensitive receptors in the project area, such as children, elderly, and infirmed, and specify the means by which impacts to these populations will be minimized (e.g. locate construction equipment and staging zones away from sensitive receptors and building air intakes).

Environmental Justice

Construction of the vertical launch area would result in changes to the view shed from State Highway 4 and could have potentially significant visual impacts. However, this would affect all viewers equally and would not result in disproportionate impacts to environmental justice populations. Construction of the control center area would have potentially greater negative impacts on residents of Boca Chica Village. While this residential community is not considered a minority population, low income data are not available. Construction would have some unavoidable minor impacts associated with other resource areas. These impacts would be minimized following all appropriate FAA, OSHA, DOT, and state requirements and guidelines, and would not be considered environmental justice impacts.

Recommendation: FAA should consider that minority and low income workers would be attracted to job opportunities in the area. Most likely the pool of applicants would be transient workers who might be disproportionately impacted by construction activities associated with the proposed project.

Tribal Resources

The United States has a unique legal relationship with federally-recognized tribes based on the Constitution, treaties, statutes, Executive Orders, and court decisions. Specific duties of federal agencies related to consultation with tribal governments are set forth in Executive Order 13175 (65 FR 67249; November 9, 2000) http://www.gpo.gov/fdsys/pkg/FR-2000-11-09/pdf/00-29003.pdf, the Presidential Memo of November 5, 2009, http://www.whitehouse.gov/the-press-office/memorandum-tribal-consultation-signed-president, and the July 30, 2010, OMB guidance for implementing the Presidential Memo http://www.whitehouse.gov/sites/default/files/omb/memoranda/2010/m1033.pdf.

Although the DEIS indicates that Tribes were identified and contacted during the scoping phase of the DEIS; however, E.O. 13175 is not referenced and it is not clear whether government-to-government consultation occurred. Coordination regarding NHPA and cultural resources occurred (Section 3.5.5.4). Consultation efforts need to be document in the Final EIS.

Recommendation: EPA requests that the FEIS provide the following information to document and confirm that:

1) potentially affected Tribes, tribal resources and citizens were identified, and

2) appropriate contact was made with the Tribal officials of potentially affected Tribes (beyond the narrow context of working with THPOs or SHPOs on issues related to historic properties (National Historic Preservation Act (NHPA)), or

3) that the agency otherwise concluded that there were not tribes or tribal resources that would be affected and there was no need for such contact or consultation.

Indirect/Cumulative/Secondary Wetland Impacts

In addition to the direct loss of wetland functions, EPA is concerned with potential secondary adverse impact to water quality and natural ecological functions by construction of this project in wetlands. EPA believes that all impacts to adjacent special aquatic sites, including wetlands have not been fully identified at the proposed site. The adjacent flats and wetlands at the launch site would be adversely affected by the project and should be considered in compensatory mitigation for all anticipated secondary and indirect impacts to waters of the U.S.

We are also concerned with the cumulative loss and future degradation of special aquatic sites, including wetlands form the proposed project. The proposed project impacts, when viewed in light of the total number of projects proposed and/or reasonably within this portion of the watershed may have a significant impact on aquatic resources in this region.

Recommendation: Under the 404 (q) MOA process, EPA has the option to elevate the permit decision to a higher level of further review. At this time, Region 6 believes resolution can be accomplished with the COE at the lowest level. We believe suitable modifications to the proposed alternative with appropriate compensatory mitigation are possible. We ask that FAA work with the US Fish and Wildlife Service and our agency to find a suitable location to enhance or restore wetlands for compensatory mitigation making the proposed plan the least damaging alternative and suitable for implementation.

Attachments:

1) EPA R6 May 21, 2013 Comments on the Section 404 Public Notice [SWG-2012000381]

2) Section 404(q) Dispute Resolution Process for Individual Permits

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

MAY 21 2013

Mr. Casey Cutler
Acting Chief, Regulatory Branch, CESWG-PE-R
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

Dear Mr. Cutler:

The Environmental Protection Agency (EPA), Region 6, has reviewed the Public Notice (PN) SWG-2012-00381, dated April 23, 2012. The following comments were prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (Guidelines) promulgated at 40 CFR Part 230 under Section 404(b)(1) of the Clean Water Act (CWA).

The applicant, Space Exploration Technologies (Space X), is proposing to construct and operate private facilities to conduct launches of the Falcon 9 and Falcon Heavy orbital vertical launch vehicles and a variety of reusable suborbital launch vehicles on privately owned land in Cameron County, Texas.

According to the PN, Space X would require two sites: the vertical launch area and the control center area and utility connections. All construction staging areas would occur within the proposed project boundaries and no additional staging areas are required. The 56.5 acre vertical launch site is located immediately adjacent to the eastern terminus of State Highway 4 (Boca Chica Boulevard), immediately south of Brazos State Park, approximately five miles south of Port Isabel and South Padre Island and eighteen miles east of Brownsville, and approximately three miles north of the U.S./Mexico border on the Gulf of Mexico.

The PN states that development of the vertical launch area at this location would affect 20 acres of the 56.5 acre property. The 20 acres would be fenced and the rest of the property would remain open space. Construction of the 20 acres would involve grading of sand dunes and filling and raising land levels high enough to avoid frequent flooding. As a result most of the land area inside the proposed fences (20 acres) would be disturbed. However, the PN does not state how many acres of waters of the U.S., including wetlands would be filled or disturbed. The DEIS states that approximately 6.19 acres of wetlands would be directly or indirectly impacted.

EPA has made two site visits to this area and finds that this area is a very remote high quality tidally influenced system that is relatively undisturbed. EPA has coordinated with other state and federal resource agencies and the U.S. Army Corps of Engineers (USACE) concerning this case. EPA staff attended the public hearings on May 7, 2013, in Brownsville, Texas and informed the applicant that the USACE must determine that the proposed discharge complies with provisions of the guidelines prior to authorization of an individual CWA Section 404 permit.

The vertical launch site is directly landward of a washover cut in the dune system along Boca Chica Beach and State Highway 4. The breach would make the launch site extremely vulnerable to storm surges and frequent flooding from tropical depressions and hurricanes from the Gulf of Mexico. The site is unstable with shallow groundwater seasonally present immediately under the hydric soil at 20 inches or less. It appears that grading, piling, filling, and launching over this saturated substrate would result in an unstable foundation and potential failure of above ground structures. It appears that construction of underground power and data lines and operation of sewage collection and treatment facilities in this drainage field would be problematic.

At the proposed vertical launch site the predominant soil series is Mustang fine sand, saline. This soil type has severe limitations for septic tank absorption fields, building site development, sanitary facilities, construction materials, and water management. The physical and chemical properties of this soil type indicates that it is highly permeable, shallow to clay, and highly saline. The soil and water features indicate that this soil type is subject to frequent flooding, a seasonal high water table, and a high risk of corrosion. It appears that with a gross liftoff weight of approximately 3.5 million pounds, the Falcon Heavy may not achieve maximum liftoff in the existing unstable substrate at this location.

EPA does not support grading and filling of waters of the U.S., including special aquatic sites located within the 100-year coastal floodplain to construct space launching sites. Stormwater runoff from filled materials, accidental rocket fuel spills, and return water from the Deluge Water System would likely result in a long-term increase in pollution in South Bay and/or the Gulf of Mexico. There are drainage patterns in waters of the U.S., including special aquatic sites. Extensive grading and filling of this area may disrupt the natural flow and circulation of waters of the U.S. to the remaining special aquatic sites and/or the Gulf of Mexico.

The DEIS states that this project is non water dependent and doesn't require siting in or on a special aquatic site, such as a wetland, to meet the basic project purpose. The EPA agrees that the basic purpose of this project is non water dependent under the guidelines. While EPA understands that SpaceX needs an exclusive launch site to meet tight launch schedules we do not understand locating the launch site in potential aquatic resources of national importance. EPA contends there are, for example, many spoil islands and other disturbed uplands along the GIWW in Texas and Louisiana that could potentially serve as a good base for the launch site and meet the other evaluation factors presented in the DEIS.

The PN states that the applicant's preliminary compensatory mitigation plan would be to purchase property with wetlands in the watershed and convey the property to a state or federal landholder. The USACE should consider other compensatory mitigation opportunities that may provide environmentally preferable mitigation and balance the impacts of the project. For compensatory mitigation, EPA prefers restoration in combination with preservation of former wetlands or the creation of new wetlands with permanent protection. For example: Inkind compensatory mitigation in the form of restoration or enhancement and long term protection at other sites in the watershed may be preferable to sole preservation and may result in a net gain of wetland functions.

In addition to the direct loss of wetland functions, EPA is concerned with potential secondary adverse impacts to water quality and natural ecological functions by construction of this project in wetlands. It appears that all impacts to adjacent special aquatic sites, including wetlands have not been identified at the proposed sites. The adjacent flats and wetlands at the launch site would be adversely affected by the project and should be considered in compensatory mitigation for all anticipated secondary impacts to waters of the U.S.

We are also concerned with the cumulative loss and further degradation of special aquatic sites, including wetlands from the proposed project. The proposed project impacts, when viewed in light of the total number of projects proposed and/or reasonably foreseeable within this portion of the watershed, may have a significant impact on aquatic resources in this region.

Under Part IV.3 (a) of the 1992 404 (q) Memorandum of Agreement (MOA), it is the opinion of EPA that the project may result in substantial and unacceptable impacts to aquatic resources of national importance. Therefore, we recommend denial of the permit, as proposed.

If you have any questions regarding our position in this case, please contact Jim Herrington of my staff at 254-770-6595.

Sincerely yours,

Jane B. Watson

Jane B. Watson, Ph.D.
Associate Director
Ecosystems Protection Branch

cc: Pat Clements, U.S. Fish and Wildlife Service, Corpus Christi, TX
Heather Young, NMFS, Galveston, TX
TCEQ, Austin, TX
Jackie Robinson, Texas Parks & Wildlife Department, Corpus Christi, TX

Section 404(q) Dispute Resolution Process for Individual Permits

EPA "May Affect" Letter

(within the Comment Period for the Public Notice)

EPA Region must notify Corps District Engineer by letter that the project may result in substantial and unacceptable impacts to Aquatic Resources of National Importance (ARNIs).

EPA "Will Affect" Letter

(within 25 days of the end of the Public Notice comment period)

If the issues raised in the "may affect" letter remain unresolved, the Region issues a letter stating that the project will have substantial and unacceptable impacts to an ARNI. The "will affect" letter must be signed by the EPA Regional Administrator.

Notice of Intent to Proceed

(within 5 calendar days prior to the issuance of a permit)

The Corps District Engineer notifies EPA Regional Administrator if the Corps intends to issue the permit contrary to EPA's recommendations in the "will affect" letter. The Corps must provide the EPA Region with a copy of the draft permit and decision document.

Case Elevation

(within 15 calendar days from receipt of the notice of intent to proceed)

The EPA Regional Administrator must decide whether to request Headquarters to seek Department of the Army level review of the District's permit decision, and subsequently notifies the Corps District of this decision. The permit is held in abeyance pending Headquarters review.

Review of Corps Decision

(within 20 calendar days of receiving the EPA Regional Administrator's request for elevation)

The EPA Assistant Administrator decides whether to seek higher level review of the District's permit decision by the Assistant Secretary of the Army (Civil Works).

Army Review

(within 30 calendar days from the EPA Assistant Administrator's request for review)

EPA Headquarters case elevation is reviewed by the Assistant Secretary of the Army (Civil Works). The Assistant Secretary may either inform the District Engineer to proceed with the permit, proceed with the permit in accordance with policy guidance specific to the case, or make a final permit decision. The Assistant Secretary of the Army (Civil Works) must notify the EPA Assistant Administrator immediately of his/her decision.

Section 404(c) "Veto Process"

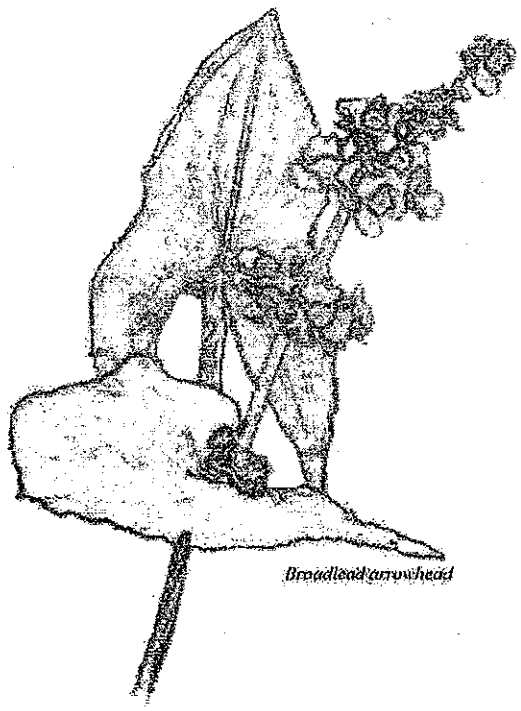
(within 10 calendar days from Assistant Secretary of the Army (Civil Works) decision)

If the Assistant Secretary decides to proceed with the issuance of the permit over EPA's objections, EPA decides whether to initiate a Section 404(c) "veto" action.

Section 404(q) Case Statistics

EPA has requested higher level of review by the Department of Army on 11 permit cases under the 1992 404(q) MOA as of January 2011, a modest number in light of the fact that the Corps processes approximately 60,000 permit actions per year.[1] Eight (8) additional permit cases were elevated to EPA Headquarters by an EPA regional office, but were resolved with the Department of Army before a final elevation package was transmitted.

[1] Source: Corps permit data 1988-2010, U.S. Army Corps of Engineers Headquarters, Regulatory Branch.



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Selected References

EPA Clean Water Act Section 404(q) Dispute Resolution Process Factsheet:
http://water.epa.gov/type/wetlands/outreach/upload/404q.pdf

1992 Section 404(q) Memorandum of Agreement:
http://water.epa.gov/lawsregs/guidance/wetlands/dispmoa.cfm or
http://www.usace.army.mil/CECW/Documents/cecwo/reg/mous/mou_epa404q.pdf

EPA Wetlands Division website:
http://water.epa.gov/type/wetlands/index.cfm

U.S. Army Corps of Engineers Headquarters Regulatory website:
http://www.usace.army.mil/CECW/Pages/cecwo_reg.aspx